



## Complete Summary

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### GUIDELINE TITLE

Preventive health care, 2001 update: Should women be routinely taught breast self-examination to screen for breast cancer?

### BIBLIOGRAPHIC SOURCE(S)

Baxter N. Preventive health care, 2001 update: should women be routinely taught breast self-examination to screen for breast cancer?. CMAJ 2001 Jun 26;164(13):1837-46. [78 references]

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Breast cancer

### GUIDELINE CATEGORY

Counseling  
Prevention  
Screening

### CLINICAL SPECIALTY

Family Practice  
Internal Medicine  
Obstetrics and Gynecology  
Oncology  
Preventive Medicine

### INTENDED USERS

Advanced Practice Nurses  
Allied Health Personnel  
Nurses  
Patients  
Physician Assistants  
Physicians  
Students

#### GUIDELINE OBJECTIVE(S)

- To evaluate the evidence relating to the effectiveness of breast self-examination to screen for breast cancer
- To provide recommendations for teaching of breast self-examination to women as part of a periodic health examination

#### TARGET POPULATION

Asymptomatic women of all ages in the general population in Canada

#### INTERVENTIONS AND PRACTICES CONSIDERED

Routine teaching of breast self-examination to women, by health professionals, as part of the periodic health examination.

#### MAJOR OUTCOMES CONSIDERED

- Prevention of breast cancer mortality
- Breast cancer incidence
- Stage of cancer detected
- Benign biopsy rate
- Number of patient visits for breast complaints
- Psychological benefits
- Morbidity

### METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)  
Hand-searches of Published Literature (Secondary Sources)  
Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

With the help of a reference librarian, the guideline developers searched Medline, Premedline, CINAHL, HealthStar, Current Contents, and the Cochrane Library 1966 through October 2000 using the terms: breast diseases, breast self-examination, palpation, mass screening and clinical trials.

The search was restricted to publications with English abstracts. Abstracts of all retrieved papers were read; those relevant to the review were critically appraised. Related articles and reference lists of key articles were searched and experts in the field were consulted to ensure that no significant studies were missed.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Quality of evidence was rated according to 5 levels:

I - Evidence from at least 1 properly randomized controlled trial (RCT).

II-1 - Evidence from well-designed controlled trials without randomization.

II-2 - Evidence from well-designed cohort or case-control analytic studies, preferably from more than 1 centre or research group.

II-3 - Evidence from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments could also be included here.

III - Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees.

#### METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

#### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The 10-member Task Force of experts in family medicine, geriatric medicine, paediatrics, psychiatry and epidemiology used an evidence-based method for evaluating the effectiveness of preventive health care interventions.

Recommendations were not based on cost-effectiveness of options. Patient preferences were not discussed.

Background papers providing critical appraisal of the evidence and tentative recommendations prepared by the primary author were pre-circulated to the members. Evidence for this topic was presented and deliberated upon in 1- to 2-day meetings from Nov 1999 to October 2000. Consensus was reached on final recommendations.

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Grades of Recommendation:

- A. Good evidence to support the recommendation that the condition or maneuver be specifically considered in a periodic health examination (PHE).
- B. Fair evidence to support the recommendation that the condition or maneuver be specifically considered in a PHE.
- C. Poor evidence regarding inclusion or exclusion of the condition or maneuver in a PHE, but recommendations may be made on other grounds.
- D. Fair evidence to support the recommendation that the condition or maneuver be specifically excluded from consideration in a PHE.
- E. Good evidence to support the recommendation that the condition or maneuver be specifically excluded from consideration in a PHE.

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

External Peer Review  
Internal Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The 10 members of the Canadian Task Force on Preventive Health Care (experts in family medicine, geriatric medicine, paediatrics, psychiatry, and epidemiology) reviewed the analysis of the guideline recommendations through an iterative process.

The task force sent the final review and recommendations to four independent experts, and their feedback was incorporated in the final draft of the manuscript.

The draft was again peer-reviewed as a part of the journal publication process.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

Recommendation grades [A, B, C, D, E] and levels of evidence [I, II-1, II-2, II-3, III] are indicated after each recommendation. Definitions for these grades and levels are repeated following the recommendations.

- Women aged 50 to 69: Because there is fair evidence of no benefit, and good evidence of harm, there is fair evidence to support the recommendation that routine teaching of breast self-examination be excluded from the periodic health examination (Thomas et al., 1997; Semiglazov et al., 1996; Semiglazov et al., 1999; UK Trial of Early Detection of Breast Cancer Group, 1999; Holmberg et al., 1997; Harvey et al., 1997; Muscat & Huncharek, 1991; Newcomb et al., 1991). (D, I, II-1, II-3, I, II-1)
- Women aged 40 to 49: Because there is fair evidence of no benefit, and good evidence of harm, there is fair evidence to support the recommendation that routine teaching of breast self-examination be excluded from the periodic health examination (Thomas et al., 1997; Semiglazov et al., 1996; Semiglazov et al., 1999; UK Trial of Early Detection of Breast Cancer Group, 1999; Holmberg et al., 1997; Harvey et al., 1997; Muscat & Huncharek, 1991; Newcomb et al., 1991). (D, I, II-1, II-3, I, II-1)
- Other groups: There is insufficient evidence for effectiveness of the maneuver in women younger than 40 or older than 70 years, thus precluding making recommendations for teaching breast self-examination to women in these age groups. The following issues may be important to consider:
  - Women younger than 40 years: There is little evidence for effectiveness specific to this group. As the incidence of breast cancer is low in this age group, the risk for net harm is even more likely.
  - Women 70 years or older: Though the incidence of breast cancer is high in this group, there is insufficient evidence to make a recommendation for women over age 70 years.

While the evidence indicates no benefit from routine instruction, some women will request teaching in breast self-examination. The pros and cons should be discussed with the woman, and if breast self-examination is taught, care must be taken to ensure that breast self-examination is conducted in a proficient manner.

#### Definitions:

##### Recommendation Grades:

- A. Good evidence to support the recommendation that the condition or maneuver be specifically considered in a periodic health examination (PHE).
- B. Fair evidence to support the recommendation that the condition or maneuver be specifically considered in a PHE.
- C. Poor evidence regarding inclusion or exclusion of the condition or maneuver in a PHE, but recommendations may be made on other grounds.
- D. Fair evidence to support the recommendation that the condition or maneuver be specifically excluded from consideration in a PHE.
- E. Good evidence to support the recommendation that the condition or maneuver be specifically excluded from consideration in a PHE.

##### Levels of Evidence:

I - Evidence from at least 1 properly randomized controlled trial (RCT).

II-1 - Evidence from well-designed controlled trials without randomization.

II-2 - Evidence from well-designed cohort or case-control analytic studies, preferably from more than 1 centre or research group.

II-3 - Evidence from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments could also be included here.

III - Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees.

#### CLINICAL ALGORITHM(S)

None provided

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### REFERENCES SUPPORTING THE RECOMMENDATIONS

[References open in a new window](#)

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

Maneuver: Routine of teaching of breast self-examination to women aged 40-49 years

Level of Evidence:

Randomized controlled trials (I)

Nonrandomized trial (II-I)

Cohort studies (II-3)

Case-controlled studies (II-3)

Maneuver: Routine teaching of breast self-examination to women aged 50 to 69 years

Level of Evidence:

Randomized controlled trials (I)

Nonrandomized trial (II-I)

Cohort study (II-3)

Case-control studies (II-3)

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

- Reduction in the number of physician visits for the evaluation of benign breast lesions found during breast self-examination

- Reduction in the negative psychological impacts related to breast self-examination training, such as increased levels of worrying, anxiety, and depression
- Health care cost savings from not teaching breast self-examination

#### Subgroups Most Likely to Benefit:

No published studies provided a clear breakdown by age of the outcomes of investigating positive breast self-examination findings. However, because the incidence of breast cancer is low among women under 30 years of age and breast lumps are commonly benign in that age group, it would be expected that the false-positive rate would be much higher among younger women than among older women.

#### POTENTIAL HARMS

Not stated

### IMPLEMENTATION OF THE GUIDELINE

#### DESCRIPTION OF IMPLEMENTATION STRATEGY

Implementation of preventive activities in clinical practice continues to be a challenge. To address this issue, Health Canada established a National Coalition of Health Professional Organizations in 1989. The purpose was to develop a strategy to enhance the preventive practices of health professionals. Two national workshops were held. The first focused on strengthening the provision of preventive services by Canadian physicians. The second addressed the need for collaboration among all health professionals.

This process led to the development of a framework or "blueprint for action" for strengthening the delivery of preventive services in Canada (Supply and Services Canada: an Inventory of Quality Initiatives in Canada: Towards Quality and Effectiveness. Health and Welfare Canada, Ottawa, 1993). It is a milestone for professional associations and one that will have a major impact on the development of preventive policies in this country.

In 1991 the Canadian Medical Association spearheaded the creation of a National Partnership for Quality in Health to coordinate the development and implementation of practice guidelines in Canada. This partnership includes the following: the Association of Canadian Medical Colleges, the College of Family Physicians of Canada, the Federation of Medical Licensing Authorities of Canada, the Royal College of Physicians and Surgeons of Canada, the Canadian Council on Health Facilities Accreditation, and the Canadian Medical Association.

The existence of guidelines is no guarantee they will be used. The dissemination and diffusion of guidelines is a critical task and requires innovative approaches and concerted effort on the part of professional associations and health care professionals. Continuing education is one avenue for the dissemination of guidelines. Local physician leaders, educational outreach programs, and computerized reminder systems may complement more traditional methods such

as lectures and written materials. Public education programs should also support the process of guideline dissemination. In this context, rapidly expanding information technology, such as interactive video or computerized information systems with telephone voice output, presents opportunities for innovative patient education. The media may also be allies in the communication of some relevant aspects of guidelines to the public. All of these technologies should be evaluated.

The implementation of multiple strategies for promoting the use of practice guidelines requires marshaling the efforts of governments, administrators, and health professionals at national, provincial and local levels. It is up to physicians and other health professionals to adopt approaches for the implementation of guidelines in clinical practice and to support research efforts in this direction.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Staying Healthy

### IOM DOMAIN

Effectiveness  
Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Baxter N. Preventive health care, 2001 update: should women be routinely taught breast self-examination to screen for breast cancer?. CMAJ 2001 Jun 26;164(13):1837-46. [78 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2001 Jun

### GUIDELINE DEVELOPER(S)

Canadian Task Force on Preventive Health Care - National Government Agency [Non-U.S.]

### SOURCE(S) OF FUNDING

The Canadian Task Force on Preventive Health Care is funded through a partnership between the Provincial and Territorial Ministries of Health and Health Canada.

## GUIDELINE COMMITTEE

Canadian Task Force on Preventive Health Care (CTFPHC)

## COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

## GUIDELINE STATUS

This is the current release of the guideline.

A complete list of planned reviews, updates and revisions is available under the What's New section at the [Canadian Task Force on Preventive Health Care \(CTFPHC\) Web site](#).

## GUIDELINE AVAILABILITY

Electronic copies: Available from the [Canadian Task Force on Preventive Health Care Web site](#).

Also available from the Canadian Medical Association Journal (CMAJ) Web site in [Portable Document Format \(PDF\)](#) and [HTML format](#).

Print copies: Available from Canadian Task Force on Preventive Health Care, 100 Collip Circle, Suite 117, London, Ontario N6G 4X8, Canada.

#### AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Stachenko S. Preventive guidelines: their role in clinical prevention and health promotion. Ottawa: Health Canada, 1994. Available from the [Canadian Task Force on Preventive Health Care \(CTFPHC\) Web site](#).
- CTFPHC history/methodology. Ottawa: Health Canada, 1997. Available from the [CTFPHC Web site](#).
- Quick tables of current recommendations. Ottawa: Health Canada, 2000. Available from the [CTFPHC Web site](#).

#### PATIENT RESOURCES

None available

#### NGC STATUS

This summary was completed by ECRI on September 25, 2001. The information was verified by the guideline developer as of October 9, 2001.

#### COPYRIGHT STATEMENT

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